

ELUENKE, F.

Kodern city trucks. p. 190.

TECHNIKA MOTORYZACYJNA vol. 6, no. 6, June 1956

Warszawa, Poland

so. EAST EUROPEAN ACCESSIONS LIST vol. 5, no. 10 Oct. 1956

BLUENKE, F.; Lukawski, M.

A small automobile for working men. p. 298.  
(TECHNIKA MOTORYZACYJNA. Vol. 6, No. 9, Sept. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, N<sub>o</sub>. 12, Dec. 1957.  
Uncl.

*BLUENKE F.*

BLUENKE, F.

Trucks and special motocars at the 16th Poznan International Fair.

p. 333 (Technika Motoryzacyjna) Vol. 7, no. 10, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

BLUDEMKE, Fryderyk, Mgr.inz.

The automobile industry in Yugoslavia. Techn motor 11 no.11:  
378-384 N '61.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9

BLUEMKE, F., mgr inz.

The Lloyd Arabella LP 900 passenger automobile. Techn  
motor 12 no. 10: 351-354 0 '62.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9"

BLUJEMKE, Fryderyk, mgr inz.

Survey of designs of low-capacity automobiles. Techn motor  
12 no. 8: 263-270 Ag '62.

*B246-12 H.F.*  
EXCERPTA MEDICA Sec 7 Vol 13/1 Pediatrics Jan 59

190. THE ACTIVITY OF ALKALINE PHOSPHATASE OF THE BLOOD IN DIPHTHERIA AND SORE THROAT PATIENTS (Russian text) - Pluger A.F. - ZH. MIKROB. EPID. I IMMUNOBOL. (Mosk.) 1957, 12 (9-11) Tables 3-4. Diphteria of the throat was accompanied in most of the examined cases by the lowering of activity of the alkaline phosphatase in the serum of the patients in the acute stage of the disease. During convalescence the activity of phosphatase became normal. In patients suffering from a non-specific sore throat an increased activity of the phosphatase was noted. Anigstein - Galveston, Tex. (L, 7, 6)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9

BUDZE, M., red.; BLUGERS, A., red.; PAVULE, A., red.; ERENSTEINE, A.,  
tekhn. red.

[Handbook on the most important infectious diseases] Svariga-  
kas infekcijas slimibas; rokasgramata. Riga, Latvijas Valsts  
izdevnieciba, 1961. 309 p. (MIRA 15:10)  
(COMMUNICABLE DISEASES)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9"

BLUKET, N. A.

Chemical Abstracts  
May 25, 1954  
Biological Chemistry

Dynamics of starch in the raspberry. N. A. Bluket. *Izv. Timiryazev. Sel'skokhoz. Akad.* 1953, No. 2 (Whole No. 4), 230-3.—Canes 1 and 2 years old as well as canes preserved in alc. were prep'd. for observation and starch analyses. One-year cuttings contained some starch in May at the very tip in the starch case. In August, starch is found in the starch case, medullary rays and premedullary zone. In the endoderm and primary bark grains of chlorophyll-contg. starch are found. Max. accumulation of starch in the stems takes place in October. Some starch is also found in the roots. In October, November, and December much starch accumulates in the bark chloroplasts. Application of I in KI soln. turns these black. In 2-year shoots starch is found in the buds prior to opening. In May these canes contain starch in the medullary rays and premedullary zone.  
J. S. Joffe—

BLUKET, N.A.

USSR/PlantPhysiology - Respiration and Metabolism.

I

Abs Jour : Ref Zhur Biol., No 12, 1958, 53271

Author : Bluket, N.A.

Inst : Moscow Agricultural Academy imeni K.A. Timiryazev

Title : Starch in the Vegetative Organs of Monocotyledonous Plants.

Orig pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957,  
vyp. 27, 88-107

Abstract : For the purpose of seeking out new plant starch-bearing plants of prospective use in the national economy, a study was made of 53 types (from 14 species) of monocotyledonous plants growing in Moskovskaya Oblast'. Fresh and fixed material was studied. Permanent preparations were stained with gentian violet and methyl violet according to the Modilev technique and hematoxylin by the

Card 1/3

USSR/Plant Physiology - Respiration and Metabolism.

I

Abs Jour : Ref Zhur Biol., № 12, 1958, 53271

Pelafield technique. Neutral red was used for *in vivo* staining. Temporary preparations were treated with Lugol's reagent (for starch) and Sudan III (for fat). Using ocular micrometry, the diameter or greatest breadth and length of the starch granules were measured. The plants were analyzed in stages of germination, flowering, fruit-bearing, and terminal vegetation. The dynamics of starch was studied in the development process of the plants in the bulbs, tubers, root-stock, and, for some plants, in the stalks as well. In bulbous plants, which blossomed in the early spring, a minimal amount of starch was observed at the beginning of fluorescence. Starch accumulated once again in the bulbs during the flowering and bearing periods. The maximal amount accumulated in this part of the plant at the end of vegetation. In cells of the garden tulip, grape hyacinth and Paris a reduction in oil droplets was noted simultaneously with

Card 2/3

- 2 -

USSR/Plant Physiology - Respiration and Metabolism.

I

Abs Jour : Ref Zhur Biol., No 12, 1958, 53271

with the accumulation of starch. In onions, starch was not encountered in the leaves, or tubers, but it was observed in the parenchymatous cells surrounding the vascular bundles at the start of the flowering period. In rootstock of perennial grasses (dew grass, quackgrass, meadow foxtail) starch was not detected even at the end of vegetation. The possible utilization was suggested of bulbs of the tulip and poet's narcissus and bulb-tubers of the garden gladiola for the purpose of obtaining starch for the preparation of adhesives. -- L.K. Polishchuk

Card 3/3

USSR / Plant Physiology. Respiration and Metabolism. I-2

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72551.

Author : Bluket, N. A.  
Inst.: Moscow Agricultural Academy imeni K. A. Timiryazev.  
Title : On the Problem of Studying Starch in Representatives  
of the Monocotyledons.

Orig Pub: Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957,  
Vyp. 28, 237-241.

Abstract: The dynamics of the accumulation and expenditure of starch in vegetative organs was studied in representatives of 50 species of monocotyledons. Histochemical sections of fresh and fixed material containing starch were studied. In early spring flowerings of bulbous plants, manifestations of starch hydrolysis were observed at a very early period. Toward the start of blossoming, starch

Card 1/2

5

BLUKET, N.A., kand. biol. nauk, dots.

Causes for the replacement of epidermis by cork in trees and shrubs  
during the period of starch minimum [with summary in English]. Izv.  
TSEhA no.1:49-58 '59. (MIRA 12:7)  
(Trees—Wounds and injuries)

BLUKET, N. A., Doc Biol Sci -- (diss) "Starch and vegetative organs of angiosperm plants." Moscow, 1960. 43 pp; (Moscow Order of Lenin Agricultural Academy im K. A. Timiryazev); 150 copies; price not given; list of author's works on page 43 (11 entries); (KL, 17-60, 145)

USSR/Microbiology. Hemoglobinophilic Bacteria. Brucellae

F-5

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 6244

Author : Blukhov A.S.

Inst : Novocherkassk Zootechnical-Veterinary Institute

Title : On the Protective Action of Saliva of Healthy Sheep in  
Brucellosis.

Orig Pub : Tr. Novocherkasskogo zootekhn.vet. in-ta, 1957, vyp. 10,  
277-282

Abstract : Saliva, obtained through a fistula from healthy sheep, was sterilized in a Seitz apparatus and mixed with various concentrations of brucellae, the mixture was kept for 24 hours at 37°, and thereafter seeded on hepatic agar and broth. In seeded mixtures of brucellae and saliva, after 24, 48, and 72 hours, growth was not observed. It was shown that the bactericidal effect of saliva depends on the concentration of the brucellae in it. Sterile saliva of healthy sheep has a bactericidal effect on a one-billion suspension of brucellae in 1 ml. after a 4 hour contact. Sterilization of the saliva

Card : 1/2

BLUKIS, G. [Blukis, G.]

Land evaluation in bourgeois Latvia, Vestis Latv ak no.2:43-51 '61.  
(EEAI 10:9)

1. Latvijas PSR Zinatnu akademija, Ekonomikas instituts,

(Land)

BLUKIS, G.

Land evaluation in bourgeois Latvia. Vestis Latv ak no.2:43-51 '61.

1. Latvijas PSR Zinatnu akademijas Ekonomikas instituts.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9

BLUKIS, G.

Criteria for land valuation in socialist economy. Vestis  
Latv ak no.6:29/37 '62.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9"

TANANAYKO, M.M.; BLUKKE, L.A.

Extraction-photometric determination of molybdenum as a  
diantipyrylmethane-thiocyanate complex. Ukr. khim. zhur. 29  
no.9:974-978 '63. (MIRA 17:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

BLUM, A.

Technical innovations in the rubber industry. p.18.

INDUSTRIA USCARA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si Departamentul Industriei Usoare din Ministerul Industriei Bunurilor de Consum) Bucuresti, Romania. Vol. 6, no. 1, Jan. 1959.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

BLUM, Anna

Sewage purification experiments by hydrocyclone. Hidrologiai  
kozlonyc 41 no. 28110-117 Ap '61.

1. Epitesugyi Miniszterium Melyepitesi Tervezo Vallalat,  
Budapest.

CP BLUM, A-I.

2

Properties of gray tin. A. I. Blum and N. A. Guryanova (Leningrad Phys. Tech. Inst.). Doklady Akad. Nauk S.S.R., 78, 507-510 (1940). Measurements were made on  $18 \times 10 \times 1.5$  mm. samples made by "self-pressing," in alumina molds of tin partly converted into the gray modification; the expansion accompanying the completion of the conversion on cooling ensures sufficiently close packing and compression of the  $\alpha$ -Sn. Comparisons with white  $\beta$ -Sn are based on the assumption that the sizes of the crystallites undergo no change when the sample of  $\alpha$ -Sn is transformed into  $\beta$ -Sn at  $100^\circ$ ; the fact that the elec. resistance of the sample converted into the white modification is found not very different from the elec. resistance of massive white Sn, is taken to indicate that, with the gray modification, too, the results are not vitiated by transition resistance between the grains. Results of measurements on  $\alpha$ -Sn, at  $+20$  and at  $-195^\circ$ , are: elec. cond.  $\sigma = 28$  and  $16.2 \text{ ohm}^{-1} \text{ cm}^{-1}$ ; Hall const.  $R = -3.2$  and  $-120 \text{ c.g.s.m.}$ ; concn. of current carriers,  $n = 2.3 \times 10^{10}$  and  $6.3 \times 10^{10}/\text{cc.}$ ; mobility  $\mu = 7.8$  and  $165 \text{ cm}^2/\text{v.sec.}$ ; thermoelec. power, against Pb, at  $+10^\circ$  and at  $-140^\circ$ ,  $a = -10$  and  $+4.6$  microvolts/degree. For white  $\beta$ -Sn,  $\sigma = 3.8 \times 10^4$  and  $1 \times 10^4$ ;  $R = <3.7 \times 10^{-1}$ ;  $a = +0.3$ . The magnitude of  $\sigma$  of  $\alpha$ -Sn is, roughly,  $1/100$  that of  $\beta$ -Sn, and its variation with the temp. is in the direction characteristic of semiconductors. The temp. variation of  $a$  shows a complex behavior; between  $+20$  and  $-30^\circ$   $a$  is neg., whereas between  $-20$  and  $-140^\circ$  it is pos., and passes through a max. at about  $-80^\circ$ . At that temp.,  $R$  was found much smaller than at either  $+20$  or  $-195^\circ$ . These facts are evidence of the presence of carriers of both signs in  $\alpha$ -Sn. N. Thon

1957

BLUM, A. I.

USSR/Electricity - Conductivity, Selenium Mar 51

"Electric Properties of Solid Solutions of Mercury Selenide and Selenium," A. I. Blum, A. R. Regel,  
Leningrad Physicotech Inst, Acad Sci USSR

"Zhur Tekh Fiziki" Vol XXI, No 3, pp 317-327

Tested elec cond of mercury selenide with small admixt of selenium within temp range from -190 to +850°C. Measured Hall's effect and differential thermoelec force within range of -180 to +200°C. Dtd fusion point of mercury selenide on these bases to be  $690 \pm 10^{\circ}\text{C}$ . Dtd limited solv of selenium in solid mercury selenide.

180T45

LC

MA BLUM, A-1.

# Chemistry - 2

**Electrical conductivity of semiconductors and inter-metallic compounds in the solid and liquid state.** I. A. I. Blum, N. P. Mokrushevskii, and A. R. Regel (Leningrad Phys.-Tech. Inst.). *Izv. Akad. Nauk S.S.R. Ser. Fiz.* 16, 139-154 (1952).—According to the band theory of semiconductors cannot account for all their properties as well as for observed electronic and hole cond. in liquids. A review of literature shows that electron transitions are short-range phenomena directed by the chem. nature of the neighbors, the geometry, and the interat. distances. The properties of solids and their melts are very similar at the m.p., but further heating of liquids can cause allotropic modifications in coordination no. and mol. size. Elec. properties of crystals with homopolar bonds abruptly change on melting; the covalent bond of the total crystal vol. goes into a metallic state and can show with further heating a transition to dielec. properties. Investigated experimentally were the following substances in which covalent bonds were suspected: Ge, Te, Te + 12% Se,  $\text{HgSe}$ ,  $\text{HgTe}$ , and  $\text{InSb}$ ; literature data on indolen Sb and Se were evaluated. Liquid Se is a semiconductor, and measurement of thermoelect. force indicates hole cond., but at high temp. it may show metallic properties. Measurements of elec. cond. of the above-mentioned compds. were made in a rotating magnetic field acting as on a stator in an asynchronous motor on a short-circuited anchor. The torque

on the suspension wire was proportional to the cond. (cf. Regel, Z. Phys., Vol. 18, 12, 1511 (1918)). Measurements on 99.98% pure Ge show a dependence of cond. on temp. in the intrinsic range of  $\log \sigma = 1.99 \times 10^{-4} T - 4.5$  and  $\Delta E \sim 0.76$  e.v. When the Ge is melted, the cond. increases 13 fold; the cond. remains const. to 900-1100° and is of the order of metallic cond. The original lattice with coordination no. 4 and  $a = 2.31$  Å changes to a coordination no. 8 and a distance of 2.70 Å.; this indicates a modification of the homopolar bond. Sb, K, and Na show the same temp. dependence of cond. in molten and solid state, which indicates that no changes in short-range order take place on melting. In Te the disown. of homopolar bonds takes place in the solid state, and the structural modification is stabilized at 700°. Addn. of 12% Se provides stronger bonds and shifts the disown. to higher temp. InSb in the solid state is an intrinsic semiconductor with  $\Delta E \sim 0.15$  and becomes metallic on melting; thus it behaves like Ge. HgSe, on the contrary, is metallic in the solid state but becomes a semiconductor on melting with  $\Delta E \sim 2.3$  e.v. HgTe has much weaker bonds than HgSe, and therefore its cond. increases in melting, remaining metallic, and a partial disown. in Hg and Te takes place.

**U S S R .**

✓ Study of the thermoelectromotive force of alloys of tellurium and selenium in the solid and liquid states. A. I. Blum and A. R. Regel. *Zhur. Tekh. Fiz.* 23, 783-7 (1957). Report of an exptl. study of the effect of temp. on the thermo e.m.f. of Te and two of its alloys with Se (85% Te + 15% Se; 30% Te + 70% Se) in the temp. range from 100 to 500°. A diagram of the app. is provided. The expts. showed that, for melts of Te and its alloys with Se, the thermo e.m.f. decreased. This confirms the idea of the increase of the metallic character of the bonds in these alloys during their melting. Electrical properties of solid solutions of Te-Se. A. I. Blum. *Ibid.* 784-95. Report of an exptl. investigation of the elec. cond., the Hall effect, and the thermo e.m.f. of solid solns. of Te-Sr (with Se contents from 0 to 15% by wt.) in the temp. interval from 30° to -190°. Results showed that in the region of low concns. of Se in the solid solns. (to 2% by wt.) the elec. cond., thermo e.m.f. and concn. curves showed anomalous forms. For a more thorough treatment of the results in this region, a detailed x-ray study is necessary. Gladys S. May.

BLDM, 2/5

U S S R .

The electrical conductivity and viscosity in Te-Se melts.  
A. I. Blum and A. R. Regel, *Zhur. Tekh. Fiz.* 23, 984-  
100 (1957).—A report of a study of the temp. function of the  
sp. resistance and the viscosity of melts in the Te-Se system,  
in the temp. interval from the m.p. to 900°. The expts.  
showed a correspondence between the relations of the sp.  
resistance and viscosity to compn. that was explained from  
the point of view of the dynamics of change of the structure  
toward a more orderly system. A general continuity of the  
change in the properties of the Te-Se system was shown.  
In particular, at a compn. of 70% Se there was no great  
change in the elec. cond. on melting. Addn. of about 2%  
of Se produced an increase in the elec. cond. and a decrease  
of the viscosity.      Gladys S. Macy

BLUM, A. I.

Dissertation: "An Investigation of the Electrical Properties of Te-Se Solutions in Solid and Liquid States." Cand Phys-Math Sci, Laboratory of Semi-Conductors, Acad Sci USSR, Leningrad, 1954. (Referativnyy Zhurnal--Fizika--Moscow, Apr 54)

SO: SUM 243, 19 Oct 1954

USSR.

✓Investigation of rectifying properties of the Se-HgSe contact. A. F. Bel'ski and A. I. Bum, *Zhur. Tekh. Fiz.* 24, 828-32 (1954).—Se was deposited on a base plate of polished Fe, Al, Ni by smearing molten Se on the plate heated to 130-80°, by melting Se powder at 340-80° or by evapn, and recrystn. Recrystn. was effected (a) by heating 8 hrs. at 120-35° and 4 hrs. at 195-210°, (b) by heating 0.5 hr. at 120-35° and 6 hrs. at 195-210°, or (c) by heating 6 hrs. at 195-210°. Fine-grain layers are given by a and large-grain by b and c. HgSe layers were pressed mechanically, evapd., or formed on the Se surface by treatment in Hg vapor. The quality of rectification depended on the grain size of Se, on the treatment of Se by Hg, and on the material of the electrodes. The rectification (forward direction with minus voltage on HgSe) was small (factor of 10). S. Pakurek

BLUM, A.I.; RYABTSOVA, G.P.

Investigating thermoelectric properties of the compounds InSb  
and GaSb in the melting region and liquid state. Fiz.tver.tela  
1 no.5:761-765 My '59.

(MIRA 12:4)

1. Institut poluprovodnikov AN SSSR, Leningrad.  
(Indium antimonide--Electric properties)  
(Gallium antimonide--Electric properties)

BLUM, A.I.

Thermoelectric properties of gallium antimonide (GaSb). Fiz.tver.  
tela 1 no.5:766-773 My '59. (MIRA 12:4)

1. Institut poluprovodnikov AN SSSR, Leningrad.  
(Gallium antimonide—Electric properties)

*Blum, A. I.*

S/181/60/002/007/040/042  
B006/B060

AUTHOR: Blum, A. I.

TITLE: Observation of Dislocations in Tellurium

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 7, pp. 1666-1668 ✓

TEXT: Various etching methods were applied for rendering dislocations visible: 1) etching with concentrated nitric acid, 2) the same, but with subsequent washing with diluted nitric and tartaric acids; 3) etching with the standard etching agent for germanium CP-4 (SR-4); 4) etching with the standard solution for electric etching (No. 1) 49 g  $H_3PO_4$  ( $1.55 \text{ g/cm}^3$ ) +  $+ 1 \text{ cm}^3 H_2SO_4 + 5 \text{ g CrO}_3$  at  $90 - 100^\circ\text{C}$ , and 5) with the electric etching agent No. 2: 84.8 g  $H_3PO_4$  ( $1.55 \text{ g/cm}^3$ ) +  $2 \text{ cm}^3 H_2SO_4 + 4.4 \text{ g CrO}_3$  at  $150 - 160^\circ\text{C}$ . Fig. 1 shows a microphotograph of a tellurium surface parallel to the c-axis and etched with No. 1. Fig. 2 shows a microphotograph of tellurium surface etched with No. 2, and Fig. 3 that of a surface etched with No. 2 after a plastic deformation of the test piece. Etching experiments with the other agents did not yield useful results.

Card 1/2

Observation of Dislocations in Tellurium

S/181/60/002/007/040/042  
B006/B060

There are 3 figures and 1 non-Soviet reference.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad  
(Institute of Semiconductors of the AS USSR, Leningrad)

SUBMITTED: December 10, 1959

✓c

Card 2/2

11310

S/064/60/000/005/006/009  
3101/0206AUTHORS: Selecki, Anatol, Blum, Alexander

TITLE: The I - x diagram for the system water vapor - hydrogen

PERIODICAL: Khimicheskaya promyshlennost', no. 5, 1960, p. 61

TEXT: The construction of an I - x diagram for humid hydrogen is described for a constant pressure of 760 mm Hg in the temperature range of from 0-100°C and a humidity of from 0-1.6 kg H<sub>2</sub>O per kg dry H<sub>2</sub>. The diagram is shown.

The following equations were applied for the calculation:

$$I = \frac{c_{pH_2}}{c_{pH_2} + c_{pH_2O}} \cdot t + i_{H_2O} \cdot x / 1000 \quad (1); \quad x = (M_{H_2O} / M_{H_2}) (\frac{p_{sat}}{T} p_{sat} / (760 - p_{sat}))$$

$$= 9q p_{sat} / (760 - q p_{sat}) \quad (2), \text{ where } M_{H_2O} \text{ and } M_{H_2} \text{ are the molecular weights.}$$

$$c_x = \frac{c_{pH_2}}{c_{pH_2} + x c_{pH_2O}} \quad (3); \quad \alpha / K_b = (Sc/Pr)^{2/3} \cdot c_x \quad (4), \text{ where } Sc \text{ is the Schmidt}$$

number and Pr the Prandtl number. Pr was assumed as being 0.71.  
 $\alpha_w - x = c/V_w \cdot K_b (t - t_w) = (c_x / V_w) (t - t_w) (Sc/Pr)^{2/3} \quad (5)$ . Sc was calculated

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S/064/6C/CCC/CSS/CS6/CC  
B1M/326

The I - x diagram for the system ...

according to  $\text{Sc} = \mu_0/\gamma D$ ; where  $\mu = (n_{\text{H}_2}\mu_{\text{H}_2} + n_{\text{H}_2\text{O}}\mu_{\text{H}_2\text{O}} + n_{\text{CH}_2\text{O}}\mu_{\text{CH}_2\text{O}})$   
 $n_{\text{H}_2}\mu_{\text{H}_2} + n_{\text{H}_2\text{O}}\mu_{\text{H}_2\text{O}} + n_{\text{CH}_2\text{O}}\mu_{\text{CH}_2\text{O}}$  (6). For  $n_{\text{H}_2}$ ,  $\mu_{\text{H}_2} = 8.13$  was set, for  $n_{\text{H}_2\text{O}}$   
 $\mu_{\text{H}_2\text{O}} = 10$ . The viscosity of  $\text{H}_2$  and  $\text{H}_2\text{O}$  vapor was calculated according to Sutherland:  $\mu = \mu_0[(T_0 + C)/(T + C)]^{2/3}$  (7), where  $\mu_0$  for hydrogen equals 0.0054 centipoise and  $C = 72$ , while the values  $\mu_0 = 0.0004$  cP,  $C = 650$  holds for water vapor. The specific gravity was calculated according to:  $\gamma = (n_{\text{H}_2}\rho_{\text{H}_2} + n_{\text{H}_2\text{O}}\rho_{\text{H}_2\text{O}})/22.4(T_0/T)$  (8) and the diffusion coefficient according to  $D = D_0(T/T_0)^{1.75}$  (9), where  $D_0$  was put as  $0.7516 \text{ cm}^2/\text{sec}$ . The validity of Eq. (4) was proved experimentally. For practical application of the diagram it is recommended to reduce the temperature for low humidity values far enough to obtain psychrometer differences of 5-7°C, because the diagram is then more accurate. The following symbols apply to the equations mentioned:  $C$  = Sutherland constant;  $c_p$  = mean specific heat for constant pressure, kcal/ $^{\circ}\text{C}\cdot\text{kg}$ ;  $c_x$  = specific heat of the

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The I - x diagram for the system ...

33021 R  
S/064/60/000/005/006/009  
B101/B206

mixture, related to 1 kg dry  $H_2$ , kcal/ $^{\circ}C \cdot kg H_2$  (dry); D = diffusion coefficient,  $m^2/sec$ ; g = gravitational constant,  $m/sec^2$ ; x = humidity content,  $g H_2 O$  per kg  $H_2$ ; i = enthalpy, kcal/kg; I = enthalpy of the humid mixture related to 1 kg absolutely dry hydrogen;  $K_g$  = constant of mass action related to the difference  $\Delta x$ ,  $kg/m^2 \cdot sec$ ; n = molar part; p = partial pressure of the water vapor, mm Hg;  $p_{sat}$  = pressure of the saturated water vapor, mm Hg; r = latent heat of vaporization, kcal/kg; t = temperature,  $^{\circ}C$ ;  $T_c$  = critical temperature,  $^{\circ}K$ ; V = content by volume of water in the mixture, %;  $\alpha$  = heat transfer coefficient,  $kcal/m^2 \cdot ^{\circ}C \cdot sec$ ;  $\gamma$  = specific gravity,  $kg/m^3$ ;  $\mu$  = viscosity,  $kg/m \cdot sec$ ;  $\varphi$  = relative humidity, %; the index  $w$  is related to the indication of the wet thermometer. There are 1 figure, 1 table, and 2 non-Soviet-bloc references. The 2 references to English-language publications read as follows: T. K. Sherwood, Absorption and Extraction, McGraw-Hill Co., London, 1937; International Critical Tables, McGraw-Hill Co., N. Y., 1929, p. 5, 62.

Card 3/4

The I - x diagram for the system ...

33021 R  
S/064/60/000/005/006/009  
B101/B206

ASSOCIATION: Department of Nuclear Chemistry, Warsaw University

Fig. The I - x diagram for the system water vapor - hydrogen at 760 mm Hg.

Card 4/14

BRETSZNAJDER, Stanislaw; LEYKO, Jadwiga; BLUM, Aleksander

On the rate of nuclei formation of a new solid phase in the reaction  
of thermal dissociation of magnesium carbonate. Roczn. chemii 35 no.5:  
1477-1486 '61.

1. Department of Technological designing, Technical University, Warsaw  
and Department of Physicochemical Problems of Technology, Institute of  
Physical Chemistry, Polish Academy of Sciences, Warsaw.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9

BIR, G. L.; ILISAVSKIY, Yu. V.; BLUM, A. I.

"The effect of uniaxial strain on the transport phenomena in p-Si."

report submitted for Intl Conf on Physics of Semiconductors, Paris,  
19-24 Jul 64.

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205610008-9"

BLUM, Anna; BENEDEK, Pal

An account of the experiment by activated sludge in connection  
with the extension of the Sewage Purification Plant of Pecs.  
Hidrologiai kozlony 41 no.6:490-493 D'61.

BLUM,B., ing.

Modern methods of internal transportation and unloading operation  
of aggregates and cement in the framework of Progresul Plant.  
Rev constr si mat constr 15 no.9:486-489 S'63.

BLUM, E.,

Pa. 150T24

**YUGOSLAVIA/Engineering - Electric Power Apr/May 49**  
**Stations**  
**Construction**

"Construction of Hydroelectric Power Stations  
During the First Five-Year Plan," E. Blum,  
Engr, Asst to Min of Elec Econ, FPRY, 3 pp

"Elektrotehnicki Vesnik: No 4/5

Discusses various problems in building hydro-  
electric power stations, which amount to 61%  
of total capital expenditure allotted to electri-  
fication in the current Five-Year Plan. Work  
is in progress on 16 federal and 22 republic  
projects.

150T24

BLUM, Endre; SERES, Peter; VASS, Bela

Graphic design of transistor inverters. Hir techn 14 no.4:  
121-126 Ag '63.

1. Beloiannisz Hiradastechnikai Gyar.

BLUM, Endre

Transistor traffic generator for telephone exchanges. Hir  
techn 15 no. 6:183-186 Je '64.

1. Belciannisz Telecommunication Factory, Budapest.

BLUM, E.

BLUM, E. Small blocks of concrete and facade veneering. p. 3.

Vol. 7 no. 39\*, Nov. 1955

CONSTRUCTORUL

Bucuresti, Rumania

So: Eastern European Accession Vol. 5 No. 4 April 1956

L 37732-66 EWT(1)/EWT(m)/T IJP(c) AT/NW  
ACC NR: AP6028241

SOURCE CODE: UR/0259/66/000/003/0004/0006

AUTHOR: Blum, E.

85  
B

ORG: none

TITLE: Plasma in energetics [magnetohydrodynamic plasma machines and electric power generation]

SOURCE: Nauka i tekhnika, no. 3, 1966, 4-6

TOPIC TAGS: thermal energy conversion, nuclear power, MHD generator, electric conduction, gas ionization

ABSTRACT: The utilization of nuclear power requires new, more effective methods of energy conversion. MHD (magnetohydrodynamic) generators appear to be the most promising means of direct conversion of the energy of heat to electricity. In this connection, the author discusses the operating principles and design of MHD plasma machines as well as the difficulties involved in developing these machines considering that gases must be heated to high temperatures before they can become electroconducting. Thus, e.g. the ionization of nitrogen commences at 8000-10,000°C; scientists, however, have succeeded in making gases electroconducting at temperatures as low as 2000-2500°C by introducing into them easily ionizable impurities (e.g. the alkali metals Ce or K), but this process is still in the research stage. Another problem currently worked on is the generation of electric power with the aid of MHD machines operating on liquid metal, which is more electroconducting than gases. Orig. art. has: 4 figures. [JPRS: 36,462]

SUB CODE: 14, 09 / SUBM DATE: none

0917

1835

MEL'NIKOV, V.K.; BLUM, E.Ya.

Experimental method for determining the integral coefficient  
of beam absorptivity for a furnace medium. Inzh.-fiz. zhur.  
5 no.8:34-39 Ag '62. (MIRA 15:11)

1. Institut energetiki AN Latviyskoy SSR, Riga.  
(Heat--Radiation and absorption)

L 3672-66 - EWT(1)/EPA(s)-2/EWT(m)/ETC/EPF(c)/EPF(n)-2/EWP(t)/EWP(b)/EWG(m) JG/  
ACCESSION NR: AP5023289 MM/JD UR/0371/65/000/004/0018/0027 87

AUTHOR: Blums, E. (Blum, E. Ya.) 4.65

31.11.55

87  
84  
3

TITLE: Simulation of heat transfer processes in ionized gases in the presence  
of an electromagnetic field

SOURCE: AN LatSSR, Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 4,  
1965, 18-27

TOPIC TAGS: heat transfer, plasma electromagnetics, gas ionization, liquid  
metal, electrolyte

ABSTRACT: Work in the field up to the present time has been limited to an analysis  
of the energy equation without taking boundary problems into account. The  
present article presents similarity criteria which characterize heat transfer in  
the presence of an electromagnetic field in a stream of incompressible and opaque  
electrically conducting liquid. The article also demonstrates the possibility of  
investigating individual questions of convective heat transfer in ionized gases by  
simulation with solutions of strong electrolytes and liquid metals. The article  
includes a sample calculation of heat transfer in a flow of ionized gases in flat  
channels in the presence of a transverse magnetic field. Neglecting radiant heat  
Card 1/2

L 3672-66

ACCESSION NR: AP5023289

transfer in the simulation of high temperature flows imposes limits on the geometric dimensions of the plasma flows. In the case of monoatomic inert gases with a 1% content of alkali metals, it has been calculated that radiation can be ignored if the thickness of the radiating flow does not exceed 2-3 cm. For diatomic or multiaatomic gases, radiation plays a significant role, even without ionizing additives, in the case of small channel cross sections. Orig. art. has: 17 formulas, 1 figure, and 1 table.

ASSOCIATION: Institut energetiki AN Latv. SSR (Energetics Institute AN LatSSR)

SUBMITTED: 25Apr65

ENCL: 00

SUB CODE: ME, TD

NR REF SOV: 010

OTHER: 006

MC  
Card 2/2

MEL'NIKOV, V.K.; BIUM, E.Ya.

Reply to A.S. Nevskii's remarks. Inzh.-fiz. zhur. 10 no.1:137-138  
Ja '66. (MIRA 19:2)

1. Institut energetiki AN Latviyskoy SSR, Riga. Submitted July 5,  
1965.

ACC NR: AP6024847

SOURCE CODE: UR/0371/66/000/002/0003/0009

AUTHOR: Blum, E. Ya. — Blums, E.

ORG: Institute of Energetics, AN LatSSR (Instiut energetiki, AN Latv SSR)

TITLE: On the Reynolds analogy in magnetic thermophysics

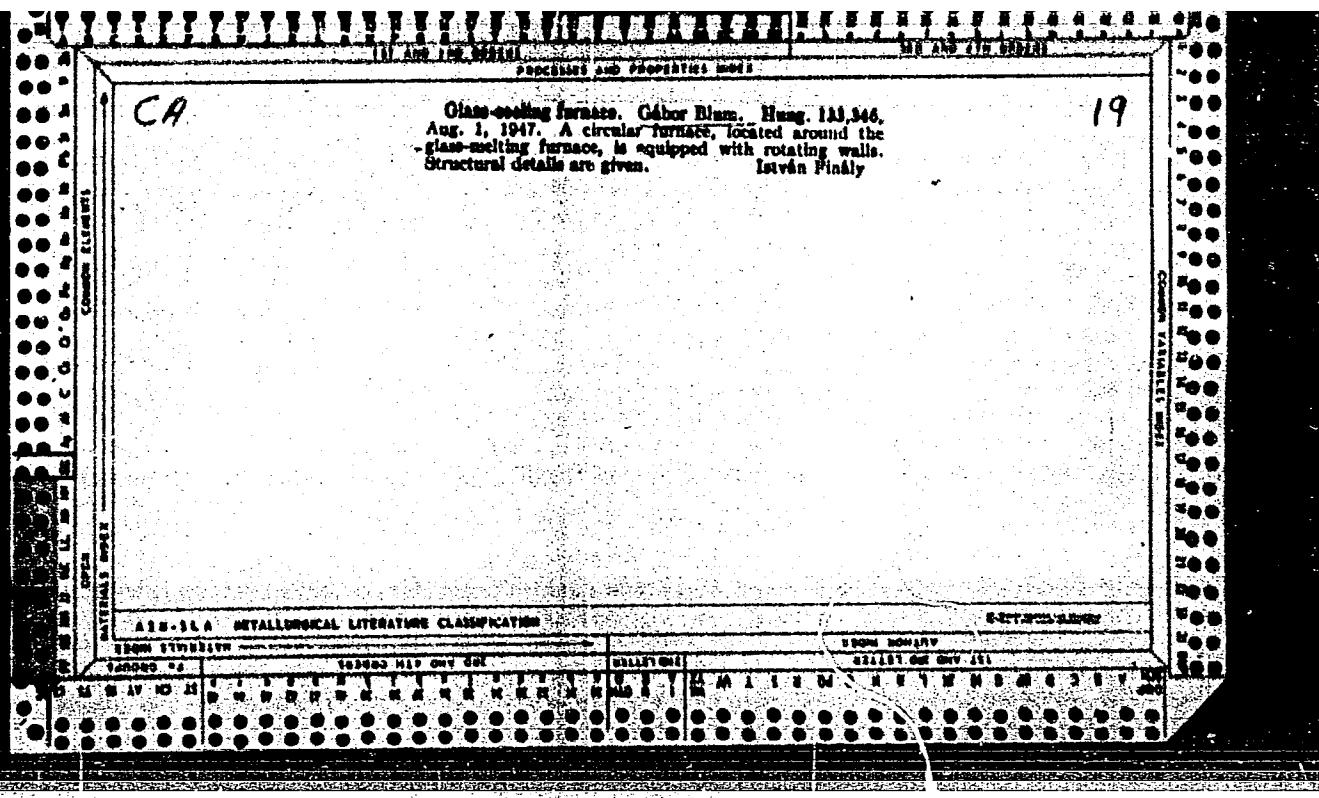
SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 2, 1966, 3-9

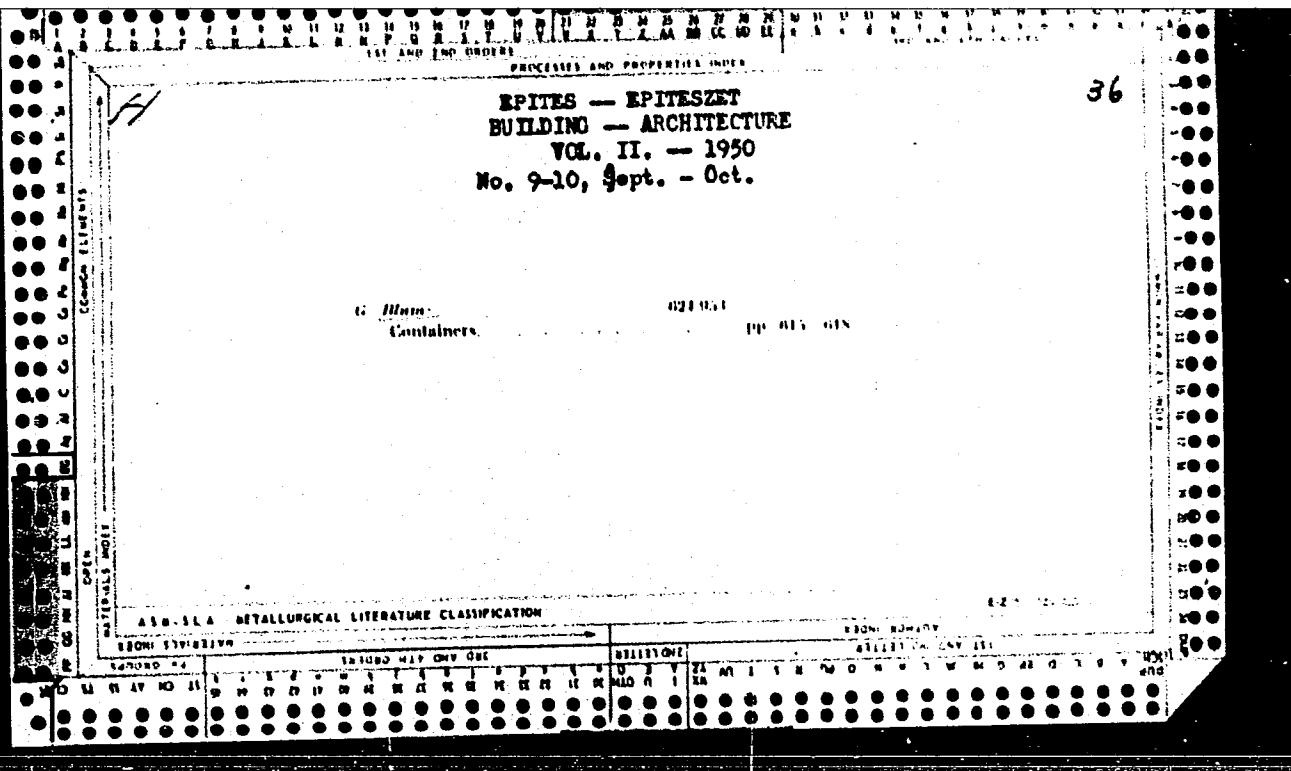
TOPIC TAGS: magnetohydrodynamics, magnetohydrodynamic heat exchange, Reynolds analogy, heat conduction, liquid property, transverse magnetic field

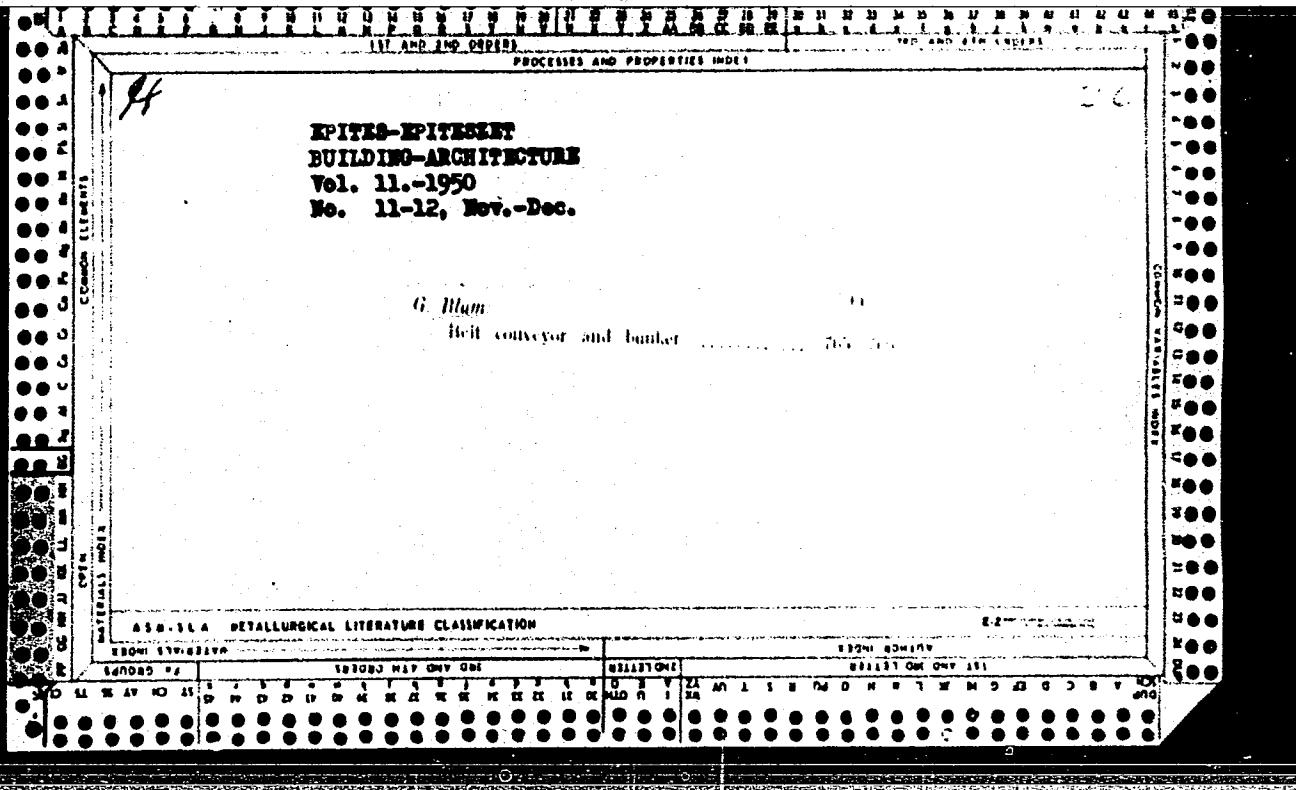
ABSTRACT: In the studies of magnetohydrodynamic heat exchange problems, methods based upon relation between heat exchange and heat resistance coefficient are often used. These methods are particularly useful in studies of turbulent flows, where a precise mathematical description of the transfer processes is at present impossible. This paper presents results of turbulent heat exchange calculations for conductive liquids in a transverse magnetic field, obtained on the basis of the Reynolds analogy. Comparison of calculated data with experimental heat exchange investigations for electrolytes in a transverse magnetic field, in the Hartman number range  $0 \leq M \leq 10$ , points to a retained analogy between frictional resistance and heat exchange in magnetic thermo-physics. Author thanks Dr. of technical sciences Yu. A. Mikhailov for valuable advice.

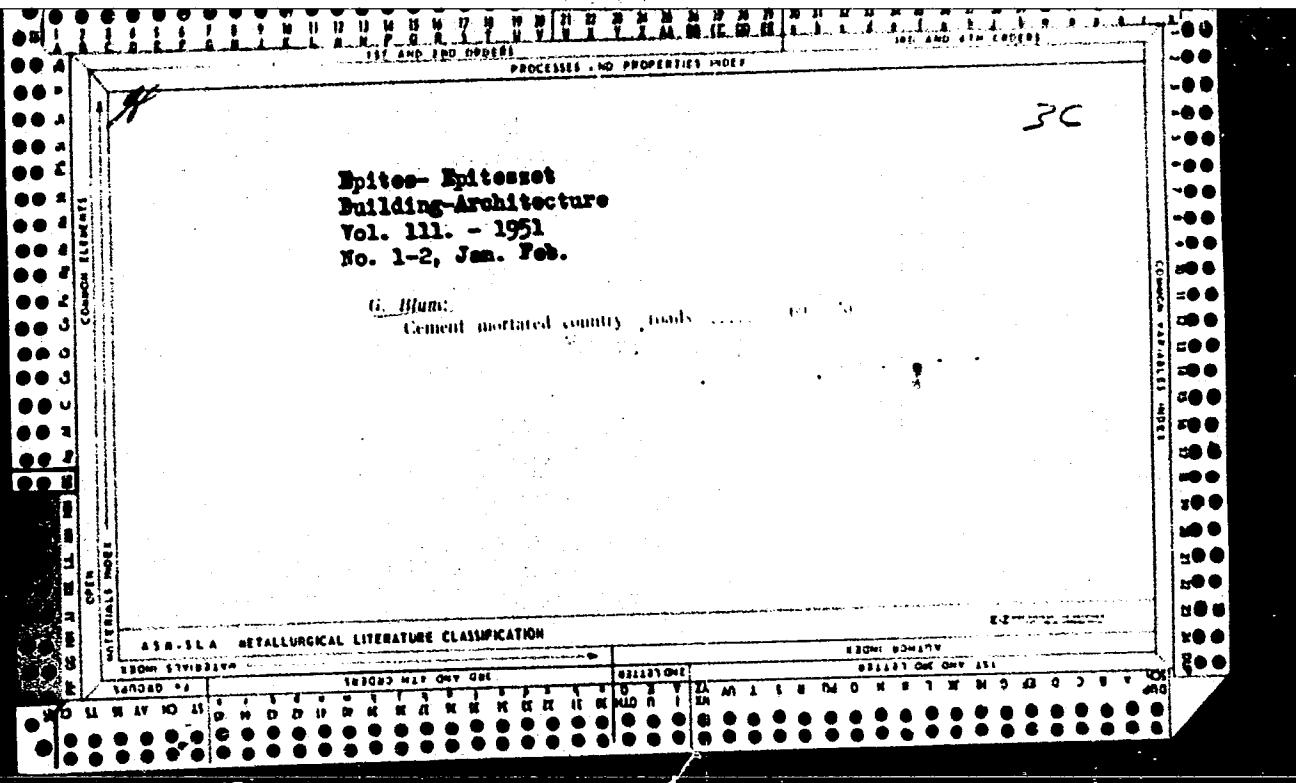
SUB CODH: 20/ SUM DATE: 30Dec65/ ORIG REF: 009/ OTH REF: 002

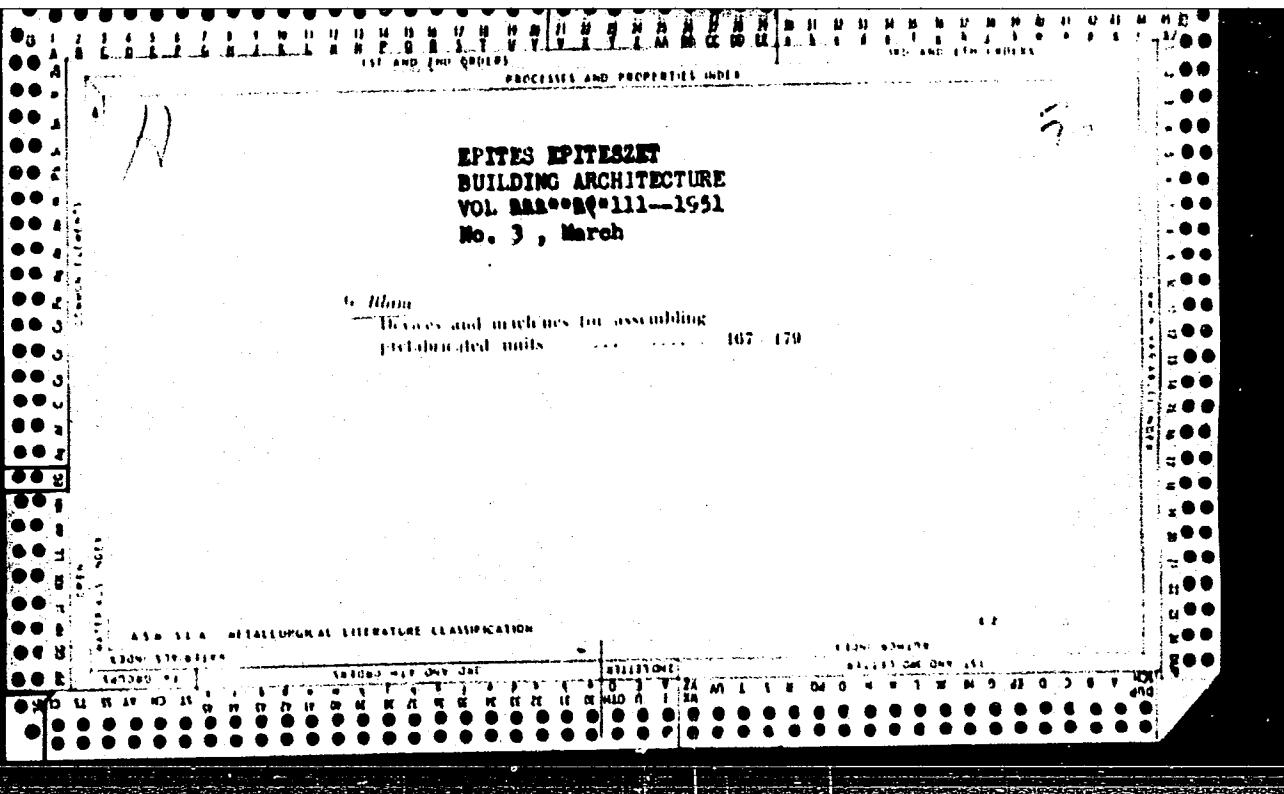
Card 1/1











*Fuel* ✓ Attempts to desulfurize coking coal. I. The sulfur compounds in coking coals used in the Romanian Peoples Republic. I. Blum, M. Coruneanu, and Tl. Piatkowski. Acad. rep. populaire Roumaine, Bul. stiint., Sect. stiint. teh. chim. 4, No. 1-2, 101-8 (1952) (French summary).  
from two regions (Banat and the river Jiu valley) were analyzed in the light of their utilization in coking. The predominant source of S in the Banat coal is of an org. nature, while in the Jiu valley coal the S is half pyritic and half org.  
Gary Gerard

3

BLUM, I.

The problem of coal in connection with the development of metallurgy in Rumania. p. 163. Academia Republicii Populare Romine. ANALELE. Bucuresti. Suppl. to v. 3, 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress.  
Vol. 5, no. 9, Sept. 1955

Distr: [REDACTED]

✓ 22951 DESULPHURIZATION OF COAL OF THE ROMANIAN PEOPLE'S  
REPUBLIC. 2- EXPERIMENTS ON THE DESULPHURIZATION OF VALEA JUINI COAL BY  
CARBONISATION IN A STREAM OF GAS. DESULPHURIZATION IN A STREAM OF HYDROGEN.

Roman, I., Pietkowska, T. and Sivru, N. (Stud. Cercet. Energ., 1977, v.1, 5,  
(1-2), 204-207) abstr. in Ref. Zh. Khim. (Ref. Chem., 1978, v.20, no. 11,  
pp. 10-11). Experiments are provided with varying a carbonization  
ratio and gas flow velocity. Thus carbonyl sulphide is removed, SO<sub>2</sub> is  
removed, but it is difficult to bring the sulphur content of the gassy coal down to the standard figure.

BLUM, I.

Attempts at desulfurization of coking coal in Rumania.  
Note III. Research on the desulfurizing action of  
certain gases during the process of coking coal in  
Valea Jinului. p. 565. STUDII SI CERCETARI DE ENERGET-  
ICA. Bucuresti. Vol. 5, no. 3/4, July/Dec. 1955

SOURCE: East European Accessions List, (EEAL) Library of Congress,  
Vol. 5, No. 11, November, 1956.

37  
Utilization of the sulfur dioxide from the combustion  
gases of lignites in thermal power plants. I. Blum, M.  
Rozenberg, Univ. Bucharest, Acad. rep. România, Radiat.  
Inst. except. Studii electrici energ. 5, No. 1-2, 81 in  
(1970). — The SO<sub>2</sub> recovery from combustion gases of coal  
used as fuel in thermal power plants is studied for 6 types of  
Romanian brown coals and lignites with 1.7% total S.  
The fuel consumption is about 100,000 tons/year for a power  
plant of 10,000 kw, and 1 million tons/year for one of 100,  
000 kw. The theoretical recovery is 114 to 10,110 tons  
and 10,140 to 131,400 tons SO<sub>2</sub>/year, resp. It is con-  
cluded that the proposed and tested methods have proved  
successful technically but not satisfactory economically.

R. D. Johnson

P.M. for  
any

RUMML./Chemical Technology. Chemical Products and Their Application. Chemical Processing of Solid Fossil Fuels.

H-22

Abs Jour: Ref Zhur-Khim., № 2, 1959, 5947.

per sq. cm. The optimum moisture in peat, producing strongest briquets depends on the granulometric composition of peat and changes together with it. The temporary resistance to bending of briquets produced was 27 - 34 kg per sq.cm; 5% crumbs or more was produced, when briquets were dropped from a height of 3 m on a cement floor. The briquets disintegrated when immersed in water. In the extraction of peat with a mixture of alcohol and benzene (1 : 1), the yield of the extract varied between 3.8 and 18.5% of the combustible mass depending on the character of peat. See RZhKhim, 1057, 66958 for report I. - M. Bogdanov.

Card : 2/2

ROMANIA

BLUM, I.; BIRCA-GALATEANU, D.; MISTOR, I.; ARCAN, L.

Bucharest, Revue d'Electrotechnique et d'Energétique, No 1, Série B,  
1963, pp 103-111

"The Infrared Spectrum of Bituminous Coal of the Valea Jiului."

*BLUM, I. L.*

RUMANIA / Chemical Technology, Chemical Products and Their  
Application, Part 3. - Treatment of Solid Combustible  
Minerals.

H-21

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12445.

Author : I.L. Blum.

Inst : Not given

Title : To The Characteristic of Coal Coking Process. Report 1.  
Bitumina Produced from Coking Coals.

Orig Pub : Studii si cercetari energ., 1956, 6, No 4, 425 - 440.

Abstract : The behavior of coke resulting from mineral oil cracking  
under coking conditions similar to the conditions of coal  
coking and the mechanism of the formation of a compact and  
solid product from mineral oil cokes at this occasion were  
investigated. The analogy between the pyrogenetic properties

Card 1/2

BLUM, I.

Effect of dead rock on coking properties of gas coal in Rumania; gas coal from Lupeni, Jiu Valley. p. 154.

REVISTA MINELOR

Vol. 7, no. 4, Apr. 1956

Rumania

Source: EAST EUROPEAN LISTS Vol. 5, no. 10 Oct. 1956

*Blum I.*RUMANIA/Chemical Technology - Chemical Products and Their  
Application. Refining of Solid Fuel Minerals.

H-22

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58599

Author : Blum, I., Nistor, I.

Inst : -

Title : Gravimetric Determination of Elements of the Classification of Several Types of Rumanian Coal.

Orig Pub : Bul. Inst. politehn. Bucuresti 1956, 18, No 3-4, 221-229

Abstract : It is shown that the gravimetric separation of some Rumanian coals occurs mainly because of a difference in structure of the organic mass and only partly because of a dissimilarity of the inorganic part. This permits the utilization of the method of gravimetric separation in the classification of coals.

Card 1/1

- 52 -

BLUM, I.

Elements for the characterization and classification of brown coal in general and  
Rumania lignites especially and for the establishment of the nomenclature.

P. 65. (Academia Republicii Populare Romine. Institutul de Energetical Studii Si  
Cenetari de Energetica. Vol. 7, no. 1, 1957, Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7,no. 2,  
February 1958

BLUM, AND OTHERS

A study on the possibilities of reducing the content of dead rock in lignite by washing with heavy liquids. Note I. Attempts to reduce lignite ashes in the coal basins of Schitu-Golesti and Rovinari.

P. 83 (Academia Republicii Populare Romane. Institutul de Energetica. Studii Si Cenetari de Energetica. Vol. 7, no. 1, 1957, Bucuresti, Rumania)

Monthly Index of East European Accessions(EEAI) LC. Vol. 7, no. 2,  
February 1958

RUMANIA/Chemical Technology - Processing of Solid Fossil Fuels. H-22

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 82930

Author : Blum, I., Piatkowski, Th., Epure, I.

Inst :

Title : The Experiments Concerning the Desulfurization of Coking Coals of RMR [Rumanian People's Republic]. Communication IV. The Influence of Inorganic Additives Upon the Sulfur Content and Its Compounds in Coke from Gas Coal from Valea Jiului.

Orig Pub : Studii si cercetari energ., 1957, 7, No 2, 201-211.

Abstract : Results are reported on the experimental carbonization of gas coal from valea Jiului in a mixture with CaO in order to obtain a strong and dense metallurgical coke.  
For Communication III, see R.Zh. Khim., 1957, 77955.

Card 1/1

- 9 -

L  
BLUM, I, AND OTHERS

Study on the possibilities of reducing the sterile content in lignites by washing with heavy liquids. II. Trials to decalcify coal from Rovinart.

P. 423 (STUDII SI CERCETARI DE ENERGETICA) (Bucuresti, Rumania) Vol. 7, no. 3.  
1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

BLUM, I., AND OTHERS

Sources of heat energy in the southeastern part of Rumania. Note I. Utilization of reed by means of auto-agglomeration. Note II. Briquetting of the partially-carbonized reed. p. 655

STUDII SI CERCETARI DE ENERGETICA. Bucuresti, Rumania. Vol. 7, no. 4, 1957

Monthly List of East European Accession. (EEA) LC, Vol. 8, no. 9, Sept. 1959  
Uncl.

BLUM, I. L.

The importance of developing the research conditions of the chemicotechnical and technological characteristics of Rumanian coal deposits.

P. 78 (REVISTA DE CHIMIE) (Bucuresti, Rumania) Vol. 8, No. 2, Feb. 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

RUMANIA/Chemical Technology - Processing of Solid Fossil Fuels. H-22

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 82906

Author : Blum, I., Rosenberg, M.

Inst :

Title : Certain Technical-Economical Problems Concerning the  
Processing of Brown Coals (Lignite) in RNR [Rumanian  
People's Republic].

Orig Pub : Rev. minelor, 1957, 8, No 2, 81-92.

Abstract : A method for evaluating the procurable energy value from  
various types of solid fuel is described. Monograms are  
suggested which make it possible to calculate the cost of  
the thermal unit for crude lignite as well as for various  
classes that are obtained by sifting.

Card 1/1

Some technical-economic aspects of the treatment, preparation, and separation of lignite coal of the Romanian People's Republic. II. Preparing the lignite by wet dressing. I. N. Mihai, M. Rădulescu, and Al. Badulescu. *R&D* (Bucharest) 3, 180 (1957), cf. *ref. 8, 81-02*. The raw material investigated was lignite coal from a pit with 5% ash which by aid of wet dressing could be made to have a concentration with 15% ash only, and 20% of the original value was lost in the process. If the untreated lignite is sold, the original value can be attained, whereas if treated, it has a value of about 110% of the natural value, compared to the value of the untreated. The choice if the lignite should be dressed or not, depends upon the distance the lignite is to be hauled to the final consumer. Within 200 km. of the pit it is best to burn the lignite as, if the right kind of boiler is available. In distances of 200-300 km., the price difference becomes insignificant, but if the lignite is to be shipped more than 300 km., a wet dressing is definitely recommended.

Werner Jacobson

BLUM, I.; ROSENBERG, M.

"Some technical-economic aspects of the treatment and processing of Rumanian brown wood coal, lignite. Pt. 5. Briquetting lignite with binding matter."

p. 525 (Revista Minelor) Vol. 8, no. 11, Nov. 1957  
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

BLUM, I. ; IONESCU-GHEORGHITA, I.; MANDEL, H.

Some considerations connected with the problem of the international classification of brown coal. p.6,  
(Standarsizarea, Vol. 9, No. 1, Jan 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (ERAl) Lc.Vol. 6, No. 8, Aug 1957. Uncl.

BLUM, I

TECHNOLOGY

BLUM, I., and others. Rational utilization of vegetable waste as fuel.  
p. 442  
Vol. 6, no. 10, Oct. 1958 (Periodicals: ENERGETICA.)

Monthly List of East European Accessions (EEAI\*, LC, Vol. 8, No. 3,  
March 1959, Unclass.

BLUM, I.

TECHNOLOGY

Periodicals: STUDII SI CERCETARI DE ENERGETICA. Vol. 8, no. 1, 1958

BLUM, I.; BOLCHI, F.; MIHAIL, M. Determining the indexes of gasification of some agricultural waste products. I. Gasification of rice hulls. p. 57

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,  
February 1959, Unclass.

COUNTRY : ROMANIA  
CATEGORY : Chemical Technology. Chemical Products and their Applications. Chemical Processing of Solid Fossil\*  
ABS. JOUR. : RZhKhim., No 19, 1959, No. 69060

AUTHOR : Blum,I.; Belchi,F.; BercoVICI,B.; Ardeleanu,V.

INSTITUTION :  

TITLE : Effect of Temperature Conditions Employed in Coking on the Coke Quality. I. Investigation of\*\*  
ORIG. PUB. : Studii si cerceteri energ., 1958, 8, No 1, 65-78

ABSTRACT : As a result of laboratory studies of coking (at up to 1000°) of the briquetted Romanian coal from Lupeni mines (A - 10%, V<sub>S</sub> - 43%) a possibility of obtaining cokes of good quality was established. This was achieved by means of using 15-20% of semi-coke (A<sub>c</sub>-12.8%, V<sub>S</sub>-16.9%) in the briquetting with the rate of temperature rise of 4° per minute while passing through the 400-700°

\*\*Coal Mined in Lupeni

\*Fuels.

Card: 1/2

COUNTRY :  
CATEGORY :

ASS. JOUR. : RZhKhim., No 19, 1959, No. 60060

AUTHOR :  
INSTITUTE :  
TITLE :

ORIG. PUP. :

ABSTRACT : temperature range. The increase of pressure em-  
ployed in briquetting improves the quality of  
coke.-- N.Kirichenko.

Card: 2/2

H - 73

BLUM, I.

TECHNOLOGY

Periodicals: STUDII SI CERCETARI DE ENERGETICA . Vol. 8, no. 1, 1958

BLUM, I. and others. On the possibility of manufacturing a desulfurized-producer gas. p. 79.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,  
February 1959, Unclass.

RUMANIA / Chemical Technology. Chemical Products and  
Their Application. Chemical Processing of  
Solid Fossil Fuels. H

Abs Jour: Ref Zhur-Khimiya, No 12, 1959, 43657.

Author : Blum I., Bolchi F., Musca G.  
Inst : Not given.

Title : Quality Improvement of the Briquetted Lignite by  
Means of Thermal Treatment and Without the Use of  
Binding Materials.

Orig Pub: Studii si cercetari energ., 1958, 8, No 2, 229-242.

Abstract: In the study devoted to possibilities of utilization of indigenous RNR lignites and of their employment for coking and for heating purposes an extensive experimentation has been conducted on the obtainment of rugged and water-resistant lignite briquetts, without the use of binding mater-

Card 1/3

H-51

RUMANIA / Chemical Technology. Chemical Products and  
Their Application. Chemical Processing of  
Solid Fossil Fuels. H

Abs Jour: Ref Zhur-Khimiya, No 12, 1959, 43657.

**Abstract:** ials. In the two series of experiments, crushed lignite to a particle size of 0-0.02 mm was briquetted under the 1500 kg/cm<sup>2</sup> pressure. Effects of material's density, particle size composition, temperature, duration of heating, residence time in a matrix, and of briquetting pressure were investigated. The results of experiments conducted at 280-400° indicate that the water-resistance of briquetts increases throughout the temperature range and reaches the normal level at 350°, while the mechanical stability increases from 6 to 15 kg/cm<sup>2</sup> in the 280-320° temperature range, then it falls abruptly as temperature increases up to 400°, reaching 1.5 kg/cm<sup>2</sup>. In the other series of tests,

Card 2/3

COUNTRY	:	Romania	H-22
CATEGORY	:		
ABS. JOUR.	:	RZKhim, No. 22 1959, No.	79745
AUTHOR	:	Blum, I. Bolchi, F., Bercovici, B., and Kraft, E.	
INST.	:	Not given	
TITLE	:	Study of the Gasification of Coke Under the Action of Carbon Dioxide	
ORIG. PUB.	:	Studii si Cercetari Energ, 8, No 2, 243-255 (1958)	
ABSTRACT	:	The authors have investigated the gasification of coke produced from Rumanian coals under the action of CO <sub>2</sub> . The coke was heated in a metal tube of 80 mm diam in a stream of 99.6% CO <sub>2</sub> at a temperature of 950° and a flow rate of 10 liters per hr. The gasification index was determined according to the formula $R = 100 \cdot CO(CO_2 + 0.5 \cdot CO)$ where R is expressed in terms of the volume of CO	
CARD:	1/3	230	

COUNTRY:	:	Rumania	H-22
CATEGORY:	:		
ABS. JOUR.	:	RZKhim, No. 22 1959 No.	79745
AUTHOR:	:		
INST.:	:		
TITLE:	:		
ORIG. PUB.:	:		
ABSTRACT:	:	obtained per volume of CO <sub>2</sub> , and CO <sub>2</sub> and CO are the percentage concentrations of the gases in the product gas mixture. The highest values of the gasification index were recorded for coke samples prepared from Lupen coals and from coals obtained from the Kozia and Sekut beds (R = 168 and R = 156-141 units, respectively). The addition of catalysts to the coke (1-3% of potassium and sodium oxides) increases the gasification index to 189-198 units. Other oxides, e.g., iron ore,	
CARD:	2/3		

BLUM, I., AND OTHERS.

Sources of heat energy in the southeastern part of Rumania. Note III.  
On the possibilities of utilizing the tar, gases, and pyroligneous water  
derived from the partial carbonization of reed. p. 257.

Academia Republicii Populare Romane. Institutul de Energetica.  
STUDII SI CERCETARI DE ENERGETICA. Bucuresti, Rumania. Vol. 8,  
no. 2, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7,  
July 1959.

Uncl.

*Blum, I.*

RUMANIA/Chemical Technology - Chemical Products and Their  
Application. Refining Solid Fuel Minerals.

H-22

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58620

Author : Blum, I., Rosenberg, M., Calota, M.

Inst :

Title : The Change of the Amount of Bonding, Depending on the  
Ash Content of Semi-Coke from Lignite, During Its  
Briquetting with Bonding:

Orig Pub : Rev. minelor, 1958, 8, No 12, 551-557

Abstract : The mathematical and graphical dependence of the amount  
of bonding on the ash content of semi-coke from lignite  
during its briquetting is worked out.

Card 1/1

COUNTRY:	:	Rumania	H-2a
CATEGORY:	:		
ABS. JOUR.	:	RZhKhim, No. 5 1960, No.	19526
AUTHOR	:	Blum, I. and Rosenberg, M.	
INST.	:	Not given	
TITLE	:	Some Technical and Economic Problems in the Processing and Utilization of Brown Coal in Rumania. VI. The Semicoking of Lignites.	
CRIG. PUB.	:	Rev Minelcr, 9, No 9, 402-409 (1958)	
ABSTRACT	:	The authors conclude from an analysis of the technical and economic indices of the semicoking of beneficiated lignites that the semicoking of lignites is uneconomical under present conditions in the Rumanian People's Republic. For Communication V see RZhKhim, 1959, No 15, 54754.	
			G. Bonvech
CARD:	1/1		

BLUM, I.; IONESCU-PANAITESCU, C.; POL, E.

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